

I am a scientist with a considerable amount of experience in research on the biomedical effects of the non ionizing radiation being considered here by the FCC. My experience leads me to wonder if the FCC has considered the possible effects of this electromagnetic (em) radiation on the function of heart pacemakers, which are implanted in literally millions of people. Putting Wi-Fi into airplanes with the resulting encouragement of the use of radiating devices could result in significant pacemaker exposure to the radiation.

The heart pacemaker manufacturers specifically warn patients to keep radiation sources, such as a cell phone and its radiation, well away from a pacemaker. In an airplane fuselage there would be additive radiation from multiple devices from multiple directions in a confined space. Also, the patients would be within an em radiation internally reflective metal tube (the fuselage) exposed to complex non homogenous em radiation with radiation hot spots. The interior of a fuselage is likely a unique situation for Wi-Fi use. The FCC and the airlines would not be able to predict the exposure at any seat location since it would vary from plane to plane and from passenger load to load, depending, in part, on who was using what radiating device, within each plane. There could be significant biomedical consequences for heart pacemaker patients.

There are other biomedical considerations in addition to effects on heart pacemakers.

Implementation by the airlines also might make an interesting legal liability situation.

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